

Figure 1 (Prior Art)

FIG. 1 is a block diagram of a prior art system 100 for measuring current. The system 100 includes a Differential Power Analyzer 104, a Microprocessor 102, and Current Probes 106. The Current Probes 106 are connected to the Differential Power Analyzer 104 and the Microprocessor 102. The Microprocessor 102 is connected to a display 110. The display 110 shows a graph of current  $i$  (in  $\mu A$ ) versus time  $t$  (in clock cycles). The graph shows a step function with four steps of increasing current. Two technicians are shown looking at the display 110.

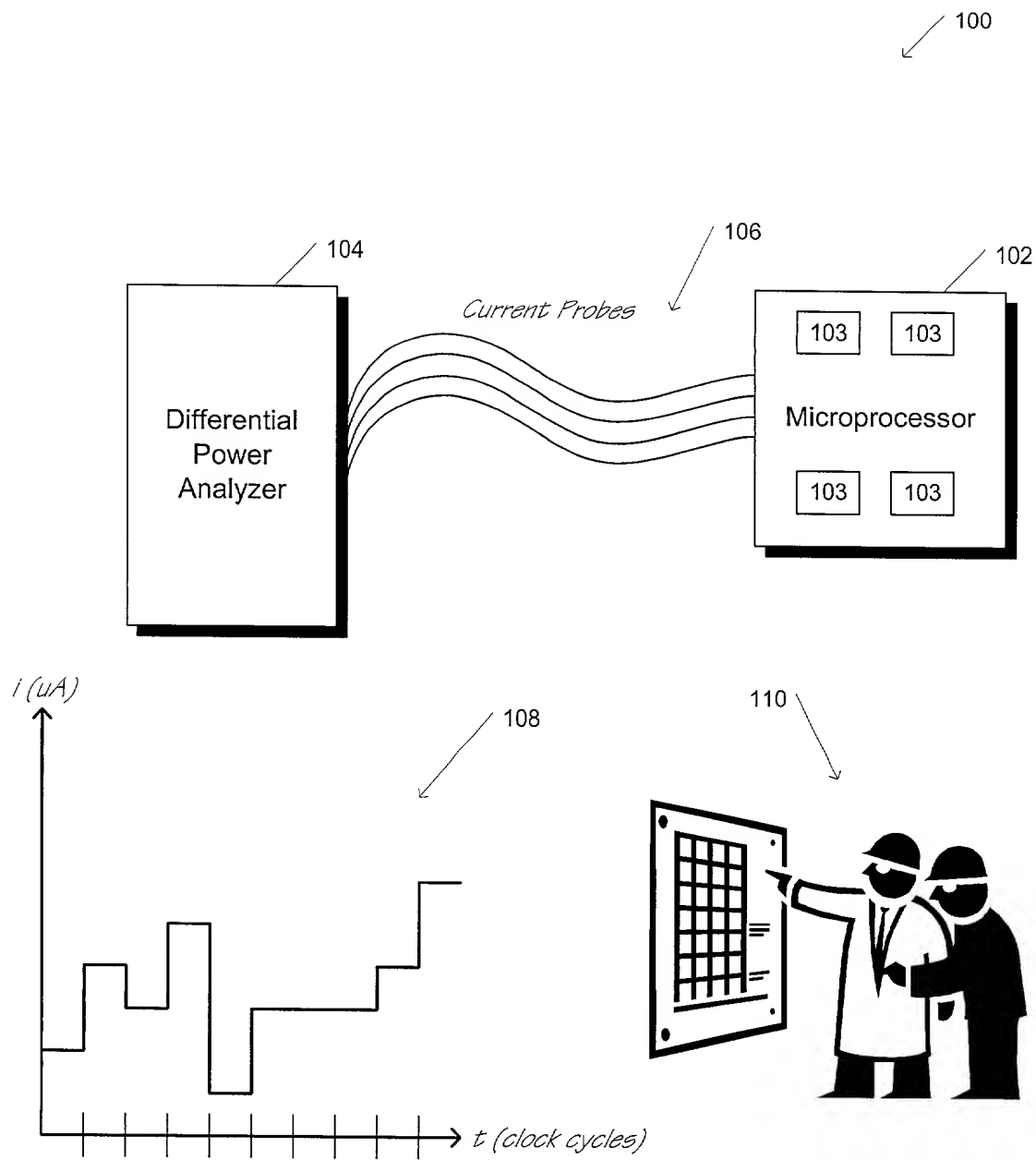
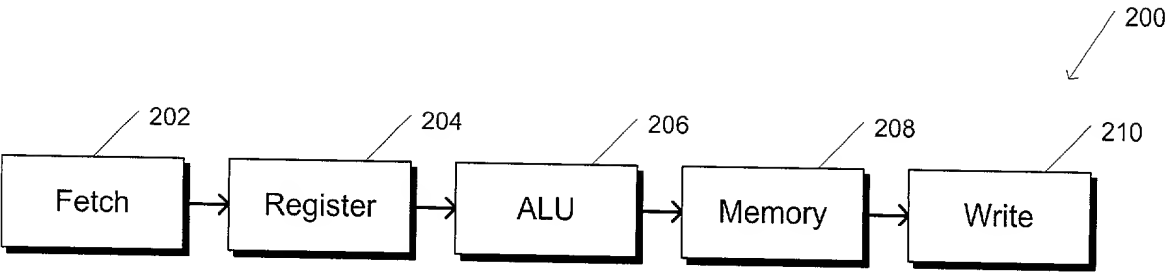


Figure 2 (Prior Art)



220				
R	A	M	W	Total
$I_4=5$	$I_3=20$	$I_2=30$	$I_1=10$	65
$I_5=10$	$I_4=20$	$I_3=20$	$I_2=20$	70
$I_6=5$	$I_5=15$	$I_4=15$	$I_3=10$	45
$I_7=10$	$I_6=20$	$I_5=20$	$I_4=10$	60
$I_8=15$	$I_7=20$	$I_6=30$	$I_5=15$	80

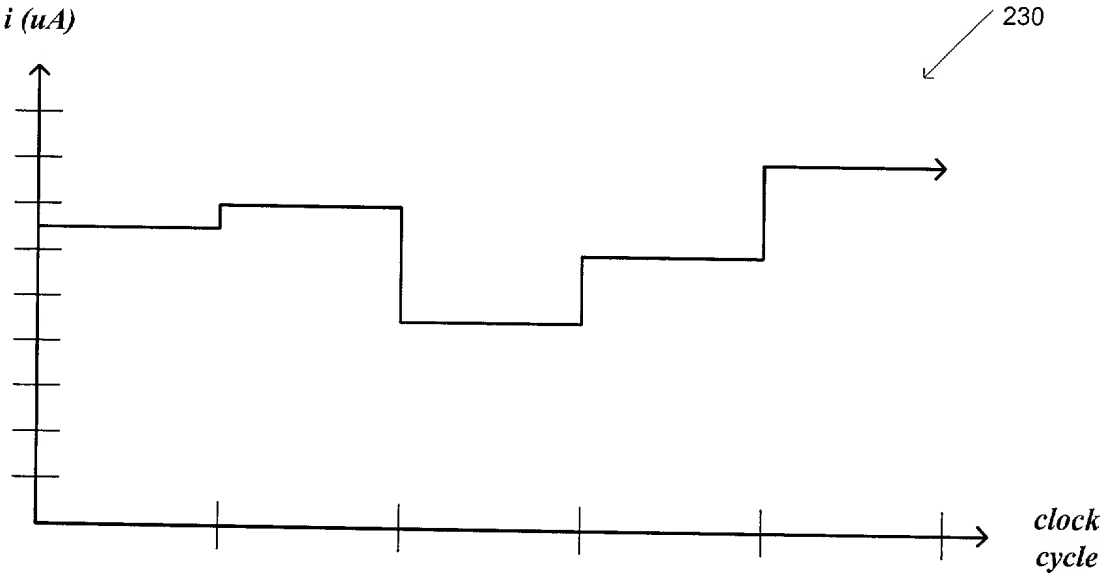


Figure 3

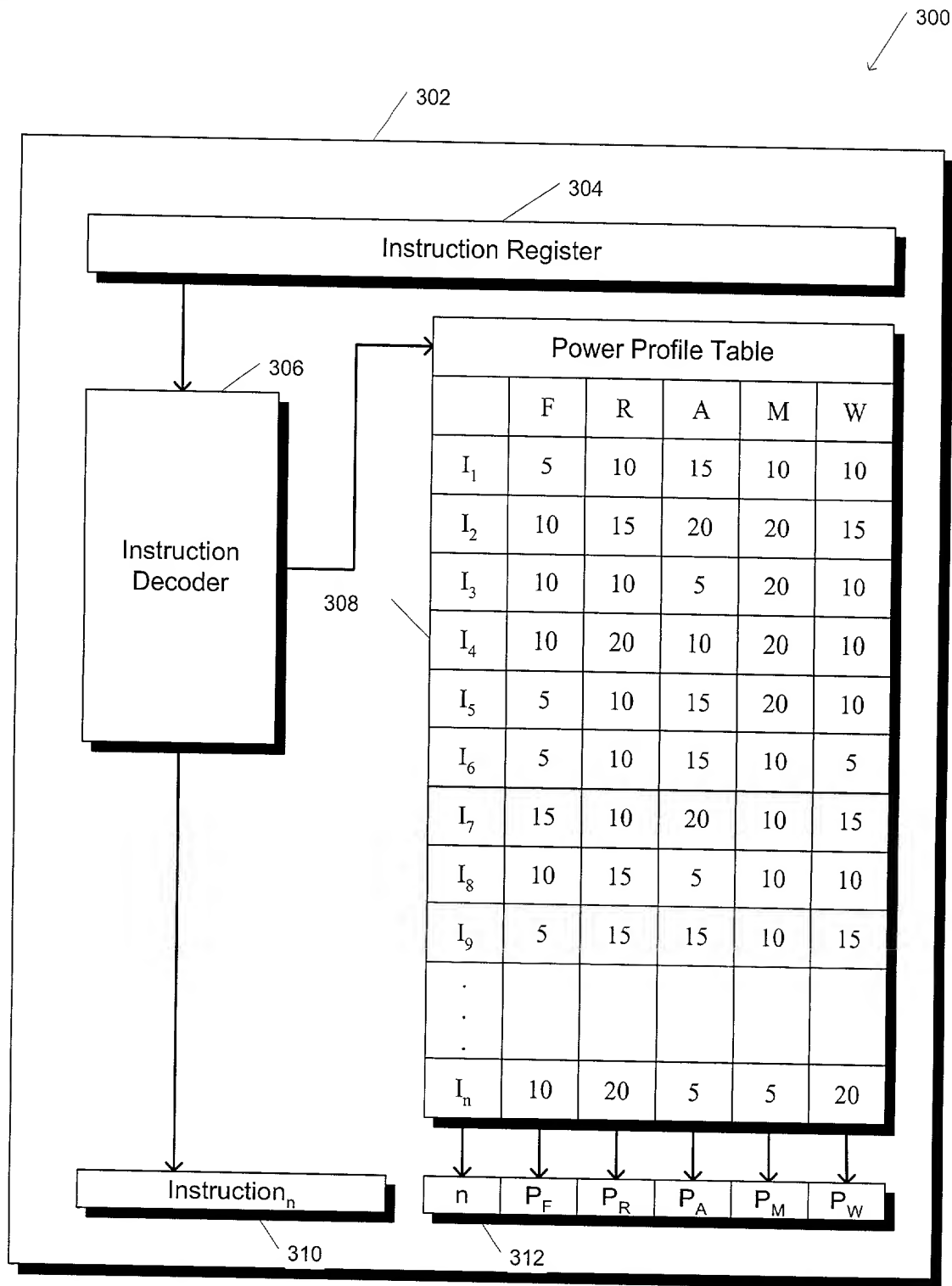


Figure 4

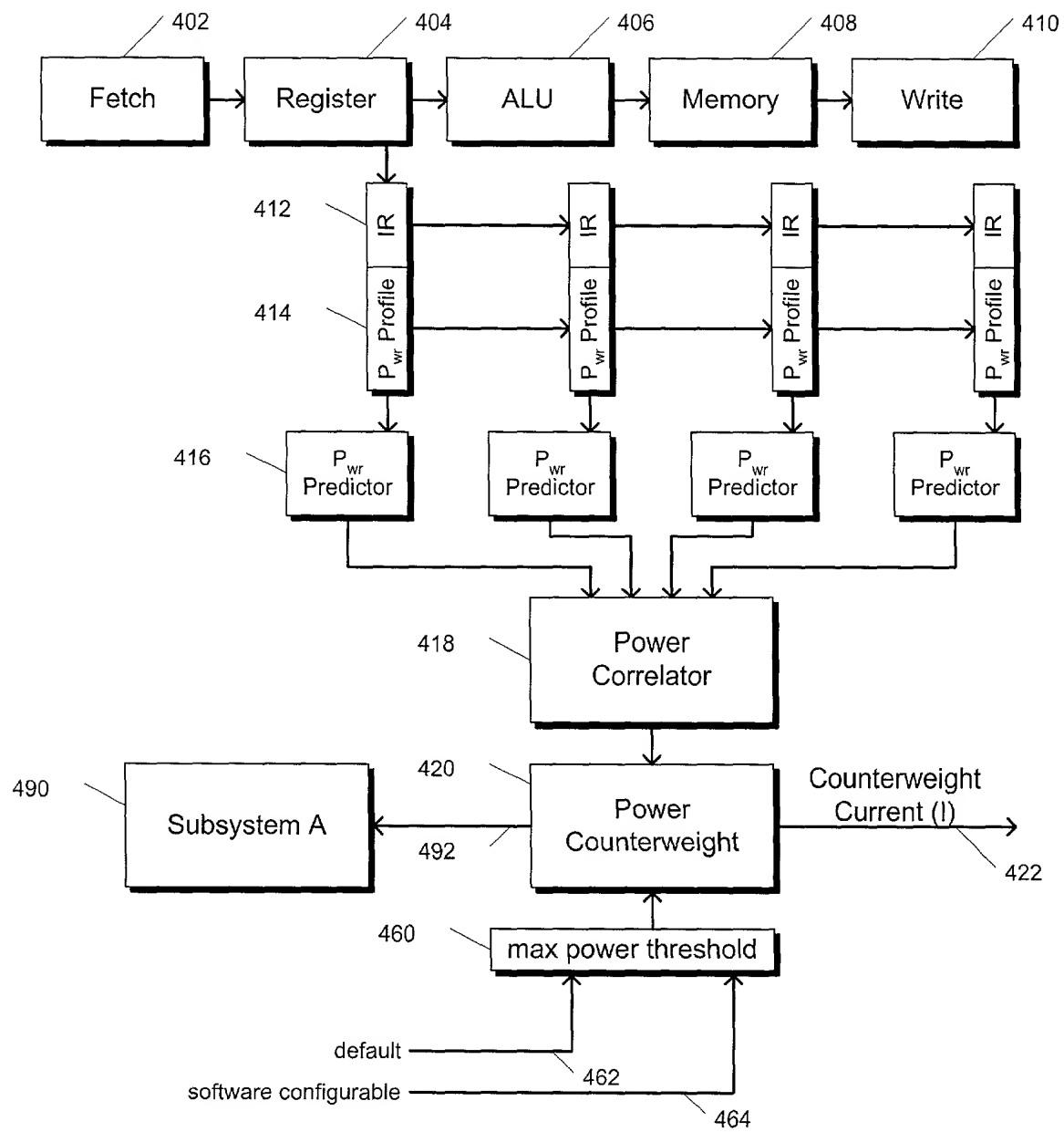


Figure 5

R	A	M	W	Total
$I_4=5$	$I_3=20$	$I_2=30$	$I_1=10$	65
$I_5=10$	$I_4=20$	$I_3=20$	$I_2=20$	70
$I_6=5$	$I_5=15$	$I_4=15$	$I_3=10$	45
$I_7=10$	$I_6=20$	$I_5=20$	$I_4=10$	60
$I_8=15$	$I_7=20$	$I_6=30$	$I_5=15$	80

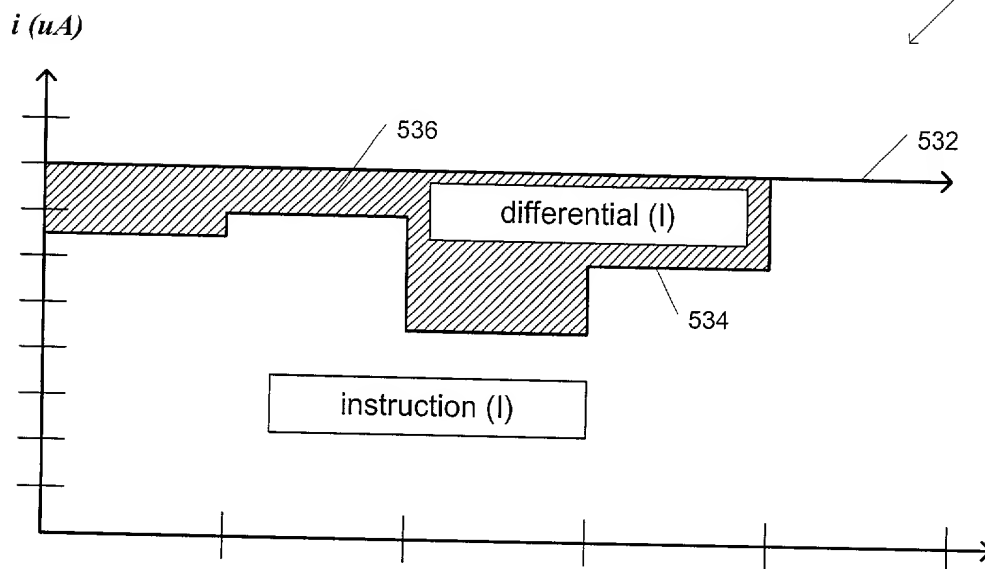


Figure 6

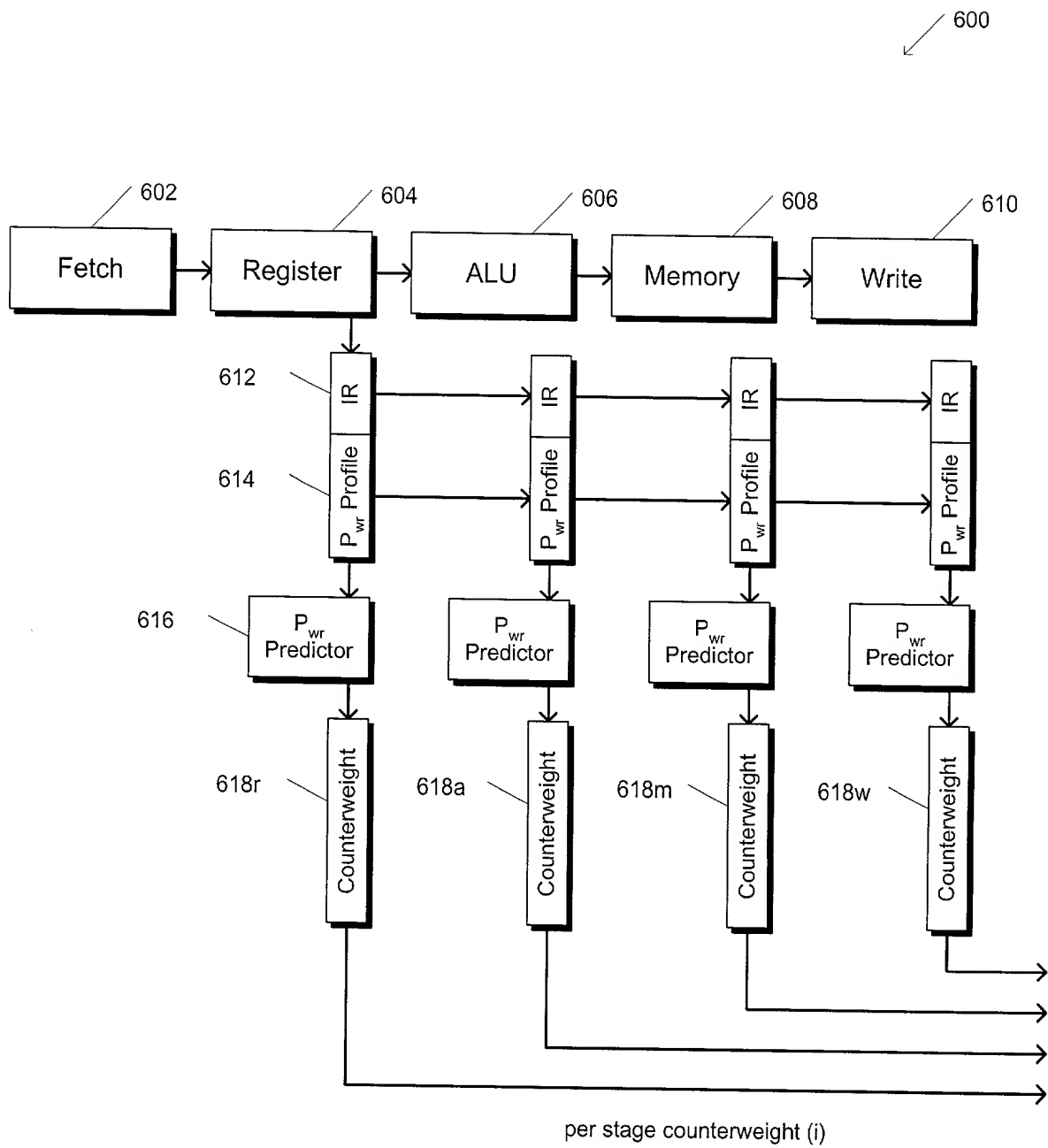


Figure 7

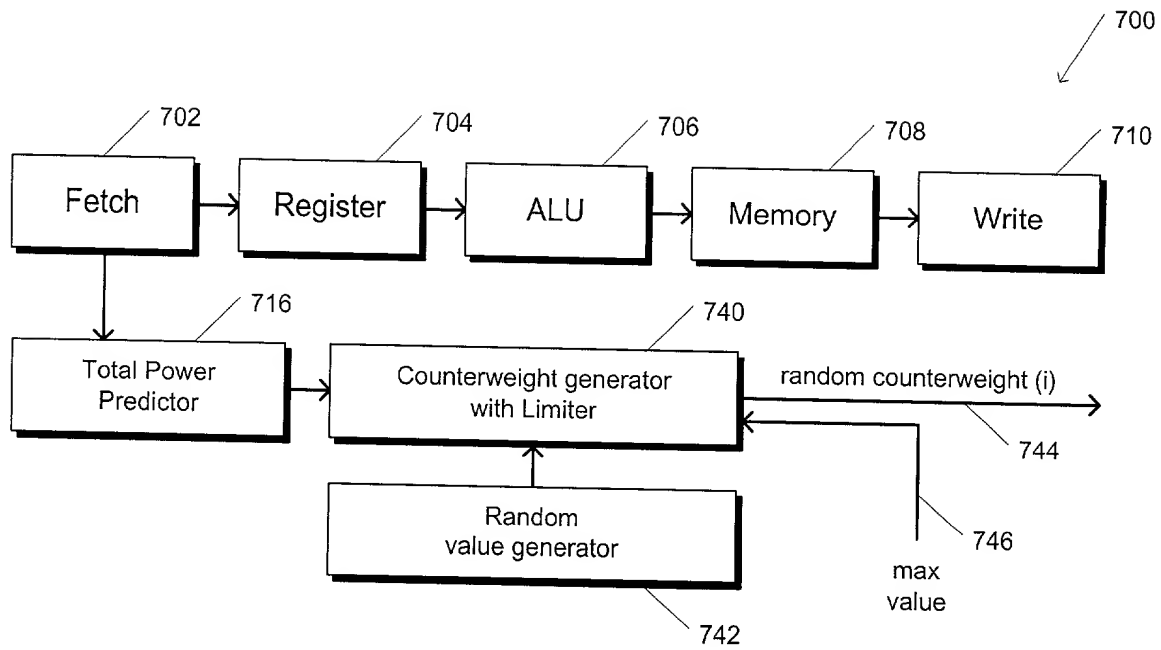


Figure 8

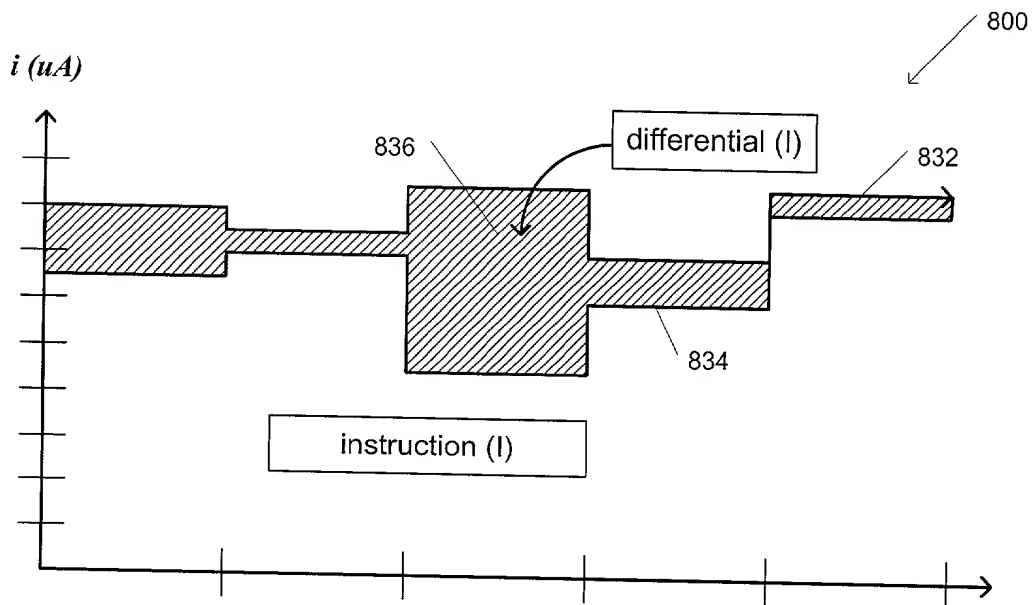


Figure 9

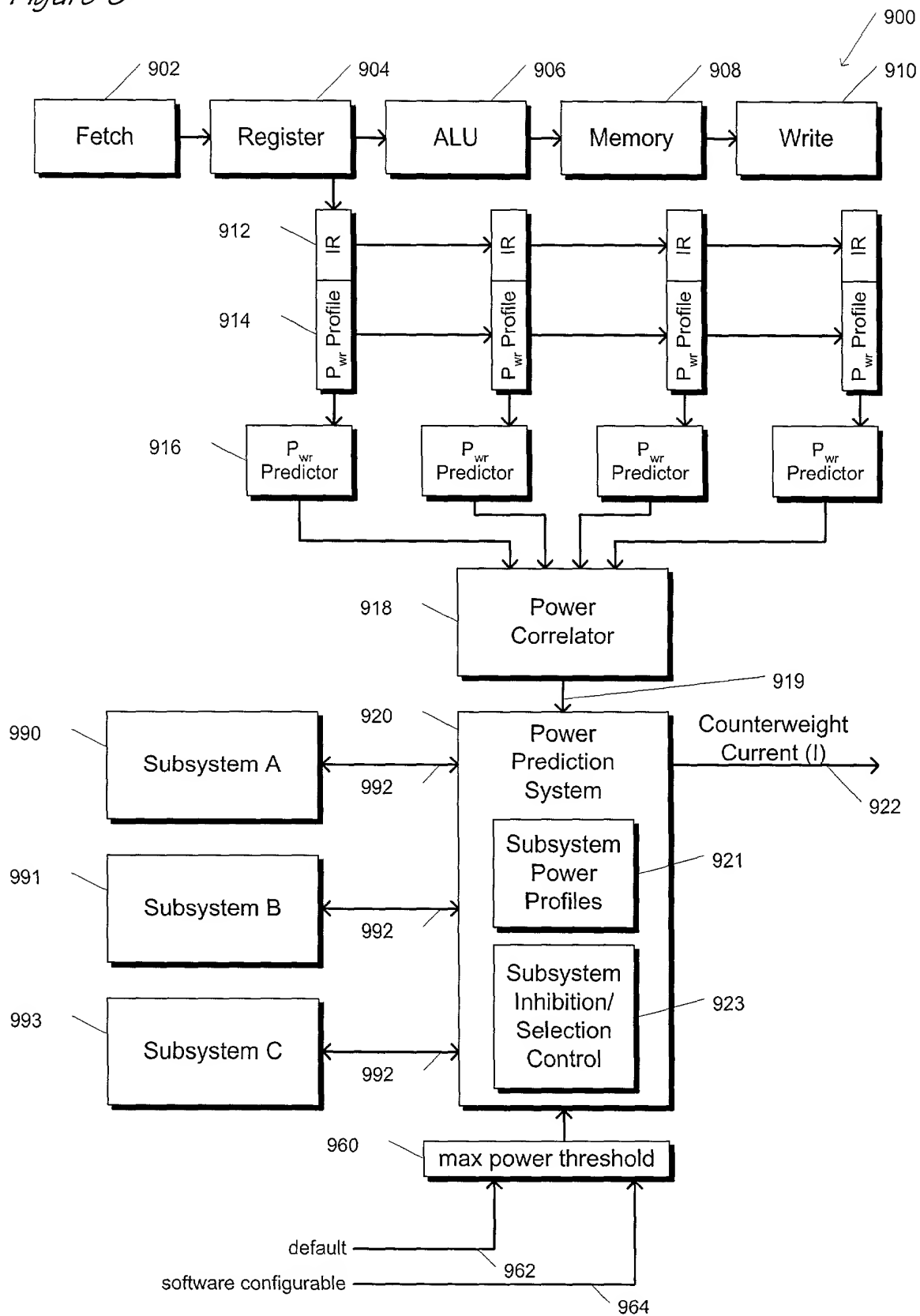




Figure 10

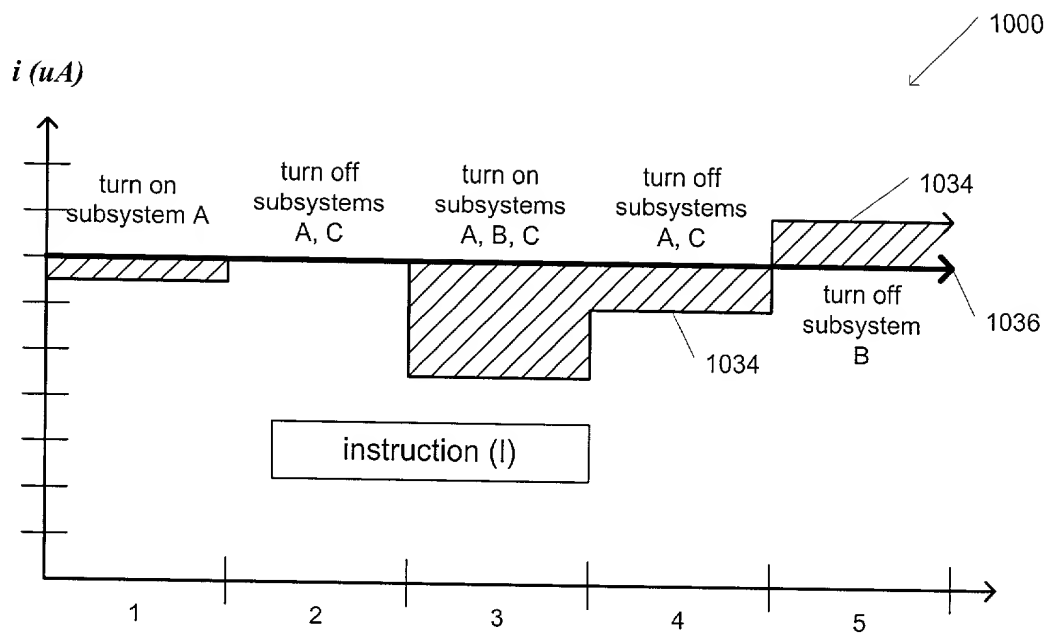


Figure 11

